Introduction

The Marine Mammal Protection Act (MMPA) of 1972 established a moratorium on the taking of all marine mammals in the United States while providing an exemption for the subsistence use of marine mammals for coastal Alaska Natives. Marine mammals are an integral part of the culture and economy in Native communities and have been for centuries. The MMPA requires subsistence harvest of sea otter, polar bear, and walrus to be:

1) done for the purposes of creating and selling of authentic Native articles of handicraft and clothing, and 2) carried out in a non-wasteful manner. Further regulations require the certification of Native harvest through the Fish and Wildlife Service's (FWS) Marking, Tagging, and Reporting Program.

In April 1994, an amendment to the MMPA included provisions for the development of cooperative agreements between the FWS and Alaska Native organizations to conserve marine mammals and provide for the co-management of subsistence use by Alaska Natives. Section 119 of the MMPA amendments authorized the appropriation of funds to the Secretary of Interior (\$1,000,000) and the Secretary of Commerce (\$1,500,000) to implement comanagement activities in Alaska. The Indigenous Peoples Council for Marine Mammals (IPCOMM), U.S. Geological Survey, Biological Resources Division (BRD), National Marine Fisheries Service (NMFS), and FWS are developing a Memorandum of Agreement to provide the foundation and direction for the use of co-management funds provided under Section 119 of the MMPA. In fiscal year 1997, \$250,000 were appropriated to the Department of the Interior to support comanagement activities on sea otters, polar bears, and walrus subsistence resources.

To facilitate co-management activities in 1997, Cooperative Agreements were completed by the FWS and the Alaska Sea Otter Commission (ASOC) on March 5,1997, and the Alaska Nanuuq Commission (ANC) and the Eskimo Walrus Commission (EWC) on February 19, 1997. The Cooperative Agreements funded a wide variety of management issues including: 1) commission co-management operations, 2) biological sampling programs, 3) harvest monitoring, 4) collection of Native knowledge in management, 5) international coordination on

A Framework For Co-management in Alaska



Planning for the Future

management issues, 6) cooperative enforcement of the MMPA, and 7) development of local conservation plans. These comanagement activities are consistent with the FWS *Native American Policy* which recognizes the importance of seeking partnerships by improving communication, experience, and perspectives to cooperatively manage fish and wildlife.

To help realize our shared management goals, ASOC, ANC, EWC, IPCOMM, and FWS held a workshop to discuss future expectations and outline a shared vision of co-management. Topics covered in the workshop included: 1) activities that are important for the conservation of sea otters, polar bear, and walrus and the co-management of subsistence use by Alaska Natives, and 2) how to share resources and responsibilities to accomplish the work. From this workshop, we developed a collective vision for co-management activities for the next three years. A vision statement was crafted and common co-management goals for sea otter, polar bear, and walrus were identified. Specific objectives for each species were also identified to accomplish co-management goals. The FWS and Alaska Native Organizations will use this document as a reference to guide future activities.



Vision Statement

Achieve the conservation and continued subsistence use of sea otter, polar bear, and walrus for future generations by cultivating and maintaining effective co-management partnerships between the Fish and Wildlife Service and Alaska Natives.



	Goal I Maintain Healthy Populations	Goal II Provide for Human Use	Goal III Conserve and Protect Essential Habitats	Goal IV Provide Information and Education	Goal V Promote International Conservation Activities	Goal VI Achieve Adequate Funding
Common Objectives	 w Determine population size, status, and trends w Develop conservation plans w Expand local harvest monitoring programs w Expand biological sampling programs w Provide feedback programs to villages w Evaluate environmental contamination impacts w Incorporate traditional Native knowledge on population distribution, abundance, and habitat use w Cooperative enforcement of regulations 	 w Incorporate comanagement strategies into the reauthorization of the MMPA w Evaluate effects of human activities w Protect the Alaska Native exemption w Develop management plans 	 w Determine baseline information on habitat use w Evaluate the presence, level, sources, and effects of environmental contamination w Evaluate the effects of human activities w Identify measures to conserve and protect essential habitats w Review proposed development activities and provide measures to avoid or mitigate impacts 	 w Implement outreach and education to increase understanding of management and conservation, including international agreements w Maintain effective relationships with local, national, and international organizations and groups 	w Develop and maintain involvement with international organizations	 w Obtain multi-year funding w Seek funding for international activities w Identify and use other resources w Develop a coordinated funding process
Sea Otter Objectives	 w Document sea otter population range changes w Conduct sea otter population assessment including mortality and distribution surveys w Identify stock(s) consistent with the MMPA 	 w Address handicraft and clothing issues w Develop a detection, interaction, and deterrent program for otter/human encounters 	 w Evaluate and quantify the effects of expanding sea otter distribution on habitat and prey resources w Evaluate and monitor habitat status and trends 		w Continue and expand involvement in Area V, U.SRussia working group activities	
Polar Bear Objectives	 w Develop, test, refine, and implement census techniques and determine trends w Determine removal from each stock 	 w Develop sustainable harvest guidelines w Develop a detection, interaction, and deterrent program for bear/human encounters 	 w Identify important denning, feeding, and migratory use areas w Quantify and identify variation in use and productivity of denning and feeding habitats w Implement the "Habitat Conservation Strategy for Polar Bears in Alaska" 		 w Develop and implement a bilateral conservation agreement between the U.S. and Russia for the shared Alaska-Chukotka polar bear population w Continue to support the North Slope Borough-Inuvialuit Game Council management agreement in the southern Beaufort Sea 	
Walrus Objectives	 w Collect community-based harvest information w Collect struck and loss information 	 w Develop non-wasteful take policies w Develop sustainable harvest guidelines 	 w Conduct walrus haulout studies w Identify important breeding, feeding, and migratory use areas 		 w Participate in international management activities w Develop and implement a bilateral conservation agreement between the U.S. and Russia for the shared Pacific walrus population 	

Co-management in Action

The FWS, ASOC, ANC, and EWC are actively involved in comanagement for the conservation of sea otters, polar bears, and walrus in Alaska. Our cooperative efforts have been very successful and everyone plans to continue and expand our activities. Here, we highlight a few of our successes with comanagement.

Sea Otter Biological Monitoring



The sea otter biological monitoring program was initiated to obtain biological information on the life history, exposure to environmental contaminants, and population health of the sea

otters in Alaska. The biological monitoring program is a "natural" co-management project. Information is gathered for the management of the sea otter from the coastal communities and the scientific information is going back into those communities completing the circle with feedback and communication.

The ASOC and FWS have been working closely to coordinate the biological monitoring program on many levels including the development of training protocols,

selection and training of Native participants, and program logistics. As of spring 1997, 28 Native people from around the State have been trained in the general necropsy and tissue collection procedures for subsistence hunted sea otters. The program has recently been expanded to include mortality surveys of selected sites to provide an age and sex index of local, natural mortality patterns.

Polar Bear Traditional Ecological Knowledge



In 1994, FWS initiated efforts to collect traditional ecological knowledge from Alaska Natives regarding polar bear habitat use in the Beaufort, Chukchi, and Bering seas and adjacent Alaskan coastline. The FWS considers traditional ecological knowledge a significant contribution to our understanding of polar bears and other species and their habitats. Native hunters live within the Arctic ecosystem and their knowledge is beneficial to resource managers in formulating sound conservation strategies. In turn, recognizing traditional ecological knowledge as an information source helps FWS and the public understand the importance of polar bears to the Inupiat and Yupik way of life.

Information from Alaska Natives regarding polar bear habitat use for denning, feeding, and seasonal movements was compiled into a series of maps for each of the 12 participating communities. The maps and accompanying narrative information were included in the Habitat Conservation Strategy for Polar Bears in Alaska (1995), which is a primary reference for guiding FWS in minimizing adverse impacts on polar bears, their habitats, and their availability for subsistence uses.



Walrus Harvest Monitoring

Each spring, FWS and the Eskimo Walrus Commission monitor the subsistence harvest of walrus in the Native villages of Gambell, Savoonga, Diomede, and Wales. FWS technicians and village residents work together to collect information on the size and demographics of the spring harvest by conducting hunter interviews and obtaining biological samples. This information

is used to assess the size and composition of the harvest and to study aspects of walrus population dynamics and life history.

In September, 1995, FWS entered into a cooperative agreement with the Alaska Department of Fish and Game, the Qayassiq (Round Island) Walrus Commission, and the Eskimo Walrus Commission to establish a co-management plan for a limited subsistence walrus hunt on Round Island. This agreement is consistent with the

conservation of the walrus population, the protection of Round Island as a walrus haulout and State Game Sanctuary, the Marine Mammal Protection Act, and the customary and traditional uses of walrus by the people of the Bristol Bay region. Under the terms of the agreement, Native hunters honor a self-imposed harvest limit and season. Hunt activities have been monitored

by FWS, the Alaska Department of Fish and Game, and the Native walrus commissions to assess the impact of the harvest on walrus abundance and behavior.







Workshop Participants

Acknowledgments

Benefits of Co-management

The co-management of subsistence use by Alaska Natives has provided opportunities for equal participation in the management of marine mammal resources including sea otters, polar bears, and walrus. Enabling coastal Alaska Natives to effectively participate in conservation and management of their subsistence resources also makes fiscal sense. In addition, co-management projects have 1) promoted environmental education and marine mammal conservation in Alaska Native communities, and 2) promoted the education of people outside of the Native communities in the traditional ecological knowledge of marine mammals. By working together on co-management projects understanding and communications are improved, trust is increased, and co-management activities are expanded.

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